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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-------------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/551,458 | 09/30/2005 | Shigenori Takayama | 053160 | 4408 |
| 38834 | 7590 | 06/12/2006 | EXAMINER | |
| WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP | | | RO, BENTSU | |
| 1250 CONNECTICUT AVENUE, NW | | | ART UNIT | |
| SUITE 700 | | | PAPER NUMBER | |
| WASHINGTON, DC 20036 | | | 2837 | |

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/551,458

Applicant(s)

TAKAYAMA ET AL.

Examiner

Bentsu Ro

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 6 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/30/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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FIRST OFFICE ACTION

1. The formal drawings filed on November 15, 2005 should be amended by labeling the function of each box in Figs. 1 and 2. For example, label Fig. 1 box 19 as "brake releasing switch"; box 16 as "pre-stage control"; box 18 as "I/O unit"; box 20 as "brake releasing switch"; etc. Label the function of each box makes the drawing much more clear and save time for the reader.

If the box is too small, the legend can be placed outside the box.

2. Applicant should amend the specification as follows:

- Page 6, line 14, change the reference numeral "14" to --17-- (the control unit).
- Page 7, line 1, change the reference numeral "13" to --15-- (the pendant).
- Page 10, line 17, change the reference numeral "23" to --24-- (the brake releasing relay).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Shimogama US Patent No. 6,498,448.

Claims read onto Shimogama's teaching as follows:

| The claims: | Shimogama's teaching: |
|------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. A control apparatus of an industrial-purpose robot equipped with an electromagnetic type brake which locks a shaft of a motor, comprising:</p> | <p>Fig. 1 shows a first embodiment of a brake release control, the control includes a motor 1 and a brake 2 for locking the motor shaft; the brake 2 is an electromagnetic type brake, see abstract line 1;</p> |
| | <p>with respect to this limitation, Shimogama does not teach <u>"an industrial purpose robot"</u>, however, the examiner considers the limitation of the industrial robot carries no patent weight because the brake releasing system does not require any specific mechanical or electrical structure of a robot;</p> |
| | <p>secondly, the Shimogama's device can obviously be used with any motor which requires an immediate brake if the motor is not rotating, such as in an industrial robot;</p> |
| <p>a first relay contact which is closed when the electromagnetic type brake is released; and</p> | <p>Fig. 1 shows a relay contact K21; to release the brake 2, the relay contact K21 must be closed, thus, the relay contact K21 is a first relay contact;</p> |
| <p>a second relay contact which is closed when driving electric power is supplied to the motor,</p> | <p>the second relay contact reads onto the relay contact K13; K13 is ganged together with relay contacts K11 and K12; the contacts K11 and K12 provide power to the motor 1 for rotating the motor 1; the contacts K11, K12, K13 are controlled by the relay K1;</p> |

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>wherein</p> <p>the first relay contact, the second relay contact, and the electromagnetic type brake are series-connected to a drive-purpose power supply of the electromagnetic type brake.</p> | <p>thus, when relay K1 is energized, all contacts K11, K12, K13 are closed and the motor is supplied with power;</p> <p>as shown in Fig. 1, the contacts K21, K13 and brake 2 are connected in series; Fig. 1 further shows an ac power supply 9 and a rectifier; the ac power supply 9 and the rectifier together constitute a drive-purpose power supply for supplying power to the brake 2 via the contacts K21 and K13.</p> |
| <p>2. The control apparatus of an industrial purpose robot as claimed in claim 1, wherein</p> <p>while a signal for closing the second relay contact is outputted,</p> <p>a signal for closing the first relay contact is outputted.</p> | <p>Fig. 1 shows a "motor driving signal";</p> <p>Fig. 1 shows a "brake releasing signal".</p> |
| <p>3. The control apparatus of an industrial purpose robot as claimed in claim 1, further comprising:</p> <p>a control unit for outputting a release signal of the electromagnetic type brake;</p> <p>manual brake releasing input member for outputting a release signal of the electromagnetic type brake by being manually operated by an operator; and</p> <p>selecting member for selecting any one of</p> | <p>as shown in text column 2, lines 25-42, there is a motor controller (not shown) for controlling the motor, there is also a servo control system (not shown) for controlling the brake releasing,</p> <p>Fig. 8 shows a momentary switch 10b; the push-button portion of the switch 10b in a manual brake releasing input member; the connection of the switch contact is a release signal;</p> <p>Fig. 8 shows an alternate switch 13.</p> |

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| the release signal outputted from the control unit and the release signal outputted from the manual brake releasing input member so as to operate the first relay and the second relay. | |
| 5. The control apparatus of an industrial purpose robot as claimed in claim 3, wherein the manual brake release input member is provided on a hand held operating device. | the alternate switch 13 can be installed in a hand-held device. |
| 6. The control apparatus of an industrial purpose robot as claimed in claim 3, wherein the manual brake releasing input member corresponds to an external signal. | the closing signal of momentary switch 10b is an external signal. |

6. Claim 4 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication should be directed to Bentsu Ro at telephone number 571 272-2072.

6/7/2006


Bentsu Ro
Senior Examiner
Art Unit 2837